

What is claimed is:

- 1 1. A method comprising:
2 causing data of a first type to be stored in a first
3 level of a unified memory device and data of a second type
4 to be stored in a second level of the unified memory
5 device.
- 1 2. A method as defined in Claim 1, wherein the data
2 of a first type is persistent data and the data of a second
3 type is dynamic data.
- 1 3. A method as defined in Claim 1, further
2 comprising:
3 causing a logical memory management boundary to be
4 disposed between the first level and the second
5 level.
- 1 4. A method as defined in Claim 3, further
2 comprising:
3 causing data fragments to be stored in segments of the
4 first level by application of a fragmented store
5 algorithm.

1 5. A method as defined in Claim 4, wherein the data
2 fragments are stored in respectively ascending segments of
3 the first level.

1 6. A method as defined in Claim 5, wherein data
2 units are stored in segments respectively ascending from
3 the memory management boundary.

1 7. A method as defined in Claim 2, further
2 comprising:
3 causing data fragments to be stored in respectively
4 ascending segments of the first level by
5 application of a fragmented store algorithm.

1 8. A method as defined in Claim 7, wherein data
2 units are stored in respectively descending segments of the
3 second memory level.

- 1 9. An apparatus comprising:
2 a first level to store persistent data;
3 a second level to store dynamic data; and
4 a memory management boundary disposed between the
5 first level and the second level.
- 1 10. An apparatus as defined in Claim 9, wherein:
2 the first level comprises a plurality of data
3 fragments and a plurality of unit headers, each
4 of the unit headers associated with a respective
5 one of the plurality of data fragments; and
6 the second level comprises a plurality of object
7 pointers and a plurality of data units, each of
8 the object pointers associated with a respective
9 one of the plurality of data units.
- 1 11. An apparatus as defined in Claim 10, wherein the
2 first level comprises, in respectively ascending order:
3 a first unit header;
4 a first data fragment; and
5 a sequence table.
- 1 12. An apparatus as defined in Claim 11, wherein the
2 memory management boundary is logically fixed.

1 13. An apparatus as defined in Claim 12, wherein the
2 first level comprises an unused area between a data
3 fragment segment and a sequence table and the second level
4 comprises an unused area between an object pointer and a
5 data unit segment.

1 14. An apparatus as defined in Claim 11, wherein the
2 memory management boundary is logically configurable.

1 15. An apparatus as defined in Claim 14, further
2 comprising an unused area between a sequence table in the
3 first level and a data unit in the second level.

1 16. An apparatus as defined in Claim 15, wherein
2 object pointers and respective associated data units occupy
3 alternatively descending positions in the second level.

1 17. A machine-readable storage article comprising
2 instructions that, if executed, enable a system to:
3 store persistent data in a first memory level of a
4 unified memory device; and
5 store dynamic data in a second memory level of the
6 unified memory device.

1 18. A machine readable storage article as defined in
2 Claim 17 further comprising instructions that, if executed,
3 enable the system to:
4 store a plurality of persistent data fragments in the
5 first memory level;
6 store a plurality of unit headers in the first memory
7 level, each of the unit headers being associated
8 with a respective one of the plurality of
9 persistent data fragments;
10 store a plurality of dynamic data units in the second
11 memory level; and
12 store a plurality of object pointers in the second
13 memory level, each of the object pointers
14 associated with a respective one of the dynamic
15 data units.

1 19. A machine readable storage article as defined in
2 Claim 18 further comprising instructions that, if executed,
3 enable the system to:
4 store a plurality of sequence tables in the first
5 memory level.

1 20. A machine readable storage article as defined in
2 Claim 19 further comprising instructions that, if executed,
3 enable the system to:
4 cause data fragments to occupy ascending segments in
5 the first memory level;
6 cause sequence tables to occupy descending segments in
7 the first memory level;
8 cause object pointers to occupy descending segments in
9 the second memory level; and
10 cause data units to occupy ascending segments in the
11 second memory level.

1 21. A machine readable storage article as defined in
2 Claim 20 further comprising instructions that, if executed,
3 enable the system to:
4 cause data fragments and unit headers to occupy
5 respectively alternating positions in the first
6 memory level;
7 cause cause sequence tables to occupy contiguous
8 positions in the first memory level;

9 cause object pointers to occupy contiguous positions
10 in the second memory level; and
11 cause data units to occupy contiguous positions in the
12 second memory level.

1 22. A machine readable storage article as defined in
2 Claim 18 further comprising instructions that, if executed,
3 enable the system to:
4 cause data fragments to occupy ascending positions in
5 the first memory level;
6 cause sequence tables to occupy descending positions
7 in the first memory level;
8 cause object pointers to occupy descending positions
9 in the second memory level; and
10 cause data units to occupy ascending positions in the
11 second memory level.

1 23. A machine readable storage article as defined in
2 Claim 22 further comprising instructions that, if executed,
3 enable the system to:
4 cause data fragments and unit headers to occupy
5 respectively alternating positions in the first
6 memory level;
7 cause cause sequence tables to occupy contiguous
8 positions in the first memory level; and

9 cause object pointers and data units to occupy
10 respectively alternating positions in the second
11 memory level.

1 24. A system comprising:
2 a storage device to store instructions that, if
3 executed, are effective to:
4 store persistent data in a first level of a unified
5 memory device;
6 store dynamic data in a second level of the unified
7 memory device; and
8 an antenna coupled to the storage device.

1 25. A system as defined in Claim 24, wherein the
2 persistent data comprises a plurality of data fragments and
3 the dynamic data comprises a plurality of data units.

1 26. A system as defined in Claim 25, further
2 comprising instructions that, if executed, are effective
3 to:
4 store a plurality of unit headers in the first level,
5 wherein each unit header is associated with a
6 data fragment and a data unit.

1 27. A system as defined in Claim 26, further
2 comprising instructions that, if executed, are effective
3 to:
4 store at least one sequence table in the first level,
5 the sequence table to link data fragments.

1 28. A system as defined in Claim 27, further
2 comprising instructions that, if executed, are effective
3 to:
4 store a plurality of object pointers in the second
5 level, each object pointer being associated with
6 a respective one of the data units.

1 29. A system as defined in Claim 28, further
2 comprising instructions that, if executed, are effective to
3 store data units in the second memory level in contiguous
4 memory segments that ascend from a logically fixed memory
5 management boundary.

1 30. A system as defined in Claim 28, further
2 comprising instructions that, if executed, are effective to
3 establish a configurable memory management boundary between
4 the first level and the second level.